Inventor: Gerardo Recinto
Title: Code Units based Framework for Domain-independent Visual Design and Development

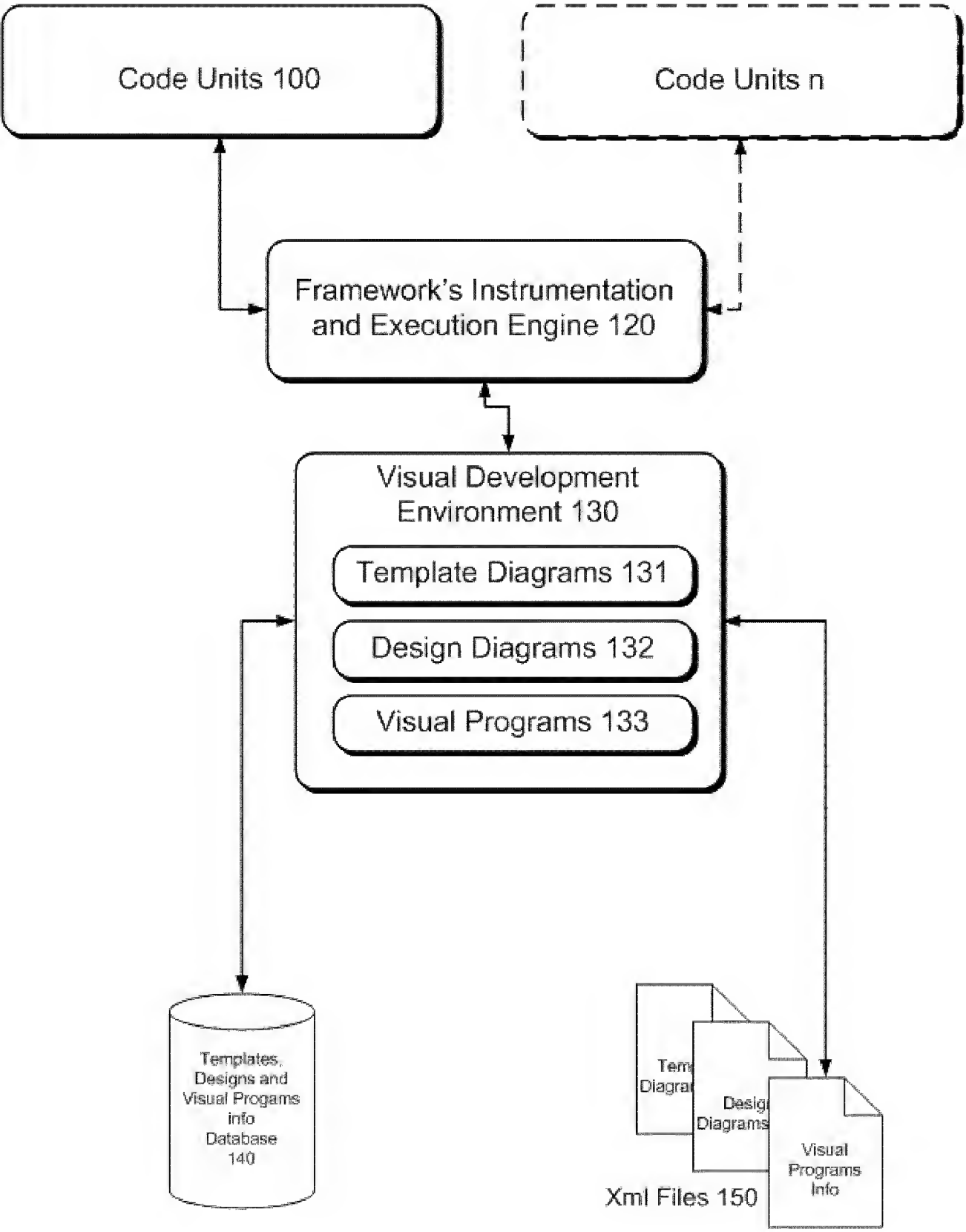

Fig. 1

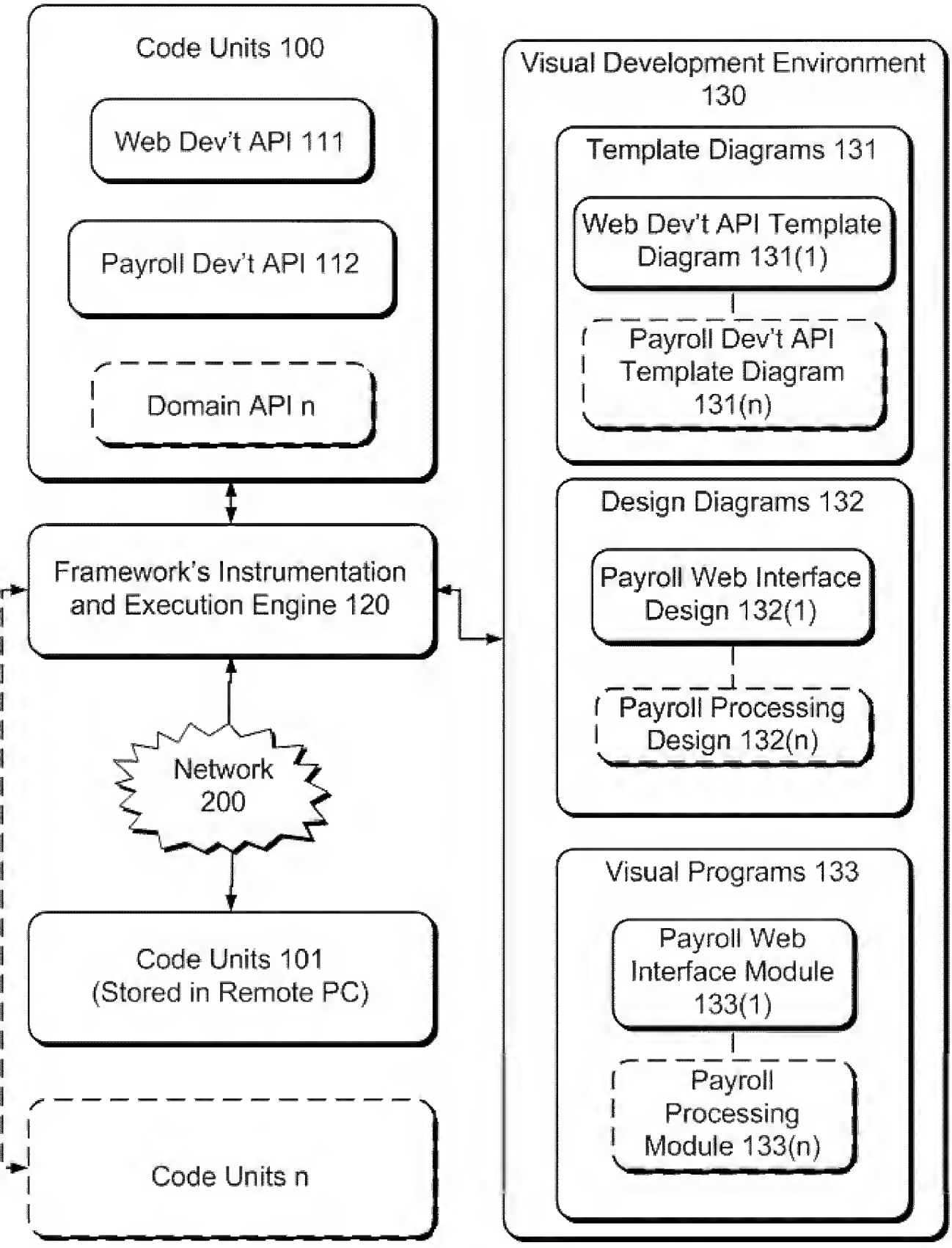
Code Units 100
Web Dev't API 111
Payroll Dev't API 112
Domain API n
Framework's Instrumentation and Execution Engine 120
Network 200
Code Units 101 (Stored in Remote PC)
Code Units n
Visual Development Environment 130
Template Diagrams 131
Web Dev't API Template Diagram 131(1)
Payroll Dev't API Template Diagram 131(n)
Design Diagrams 132
Payroll Web Interface Design 132(1)
Payroll Processing Design 132(n)
Visual Programs 133
Payroll Web Interface Module 133(1)
Payroll Processing Module 133(n)

Fig. 2

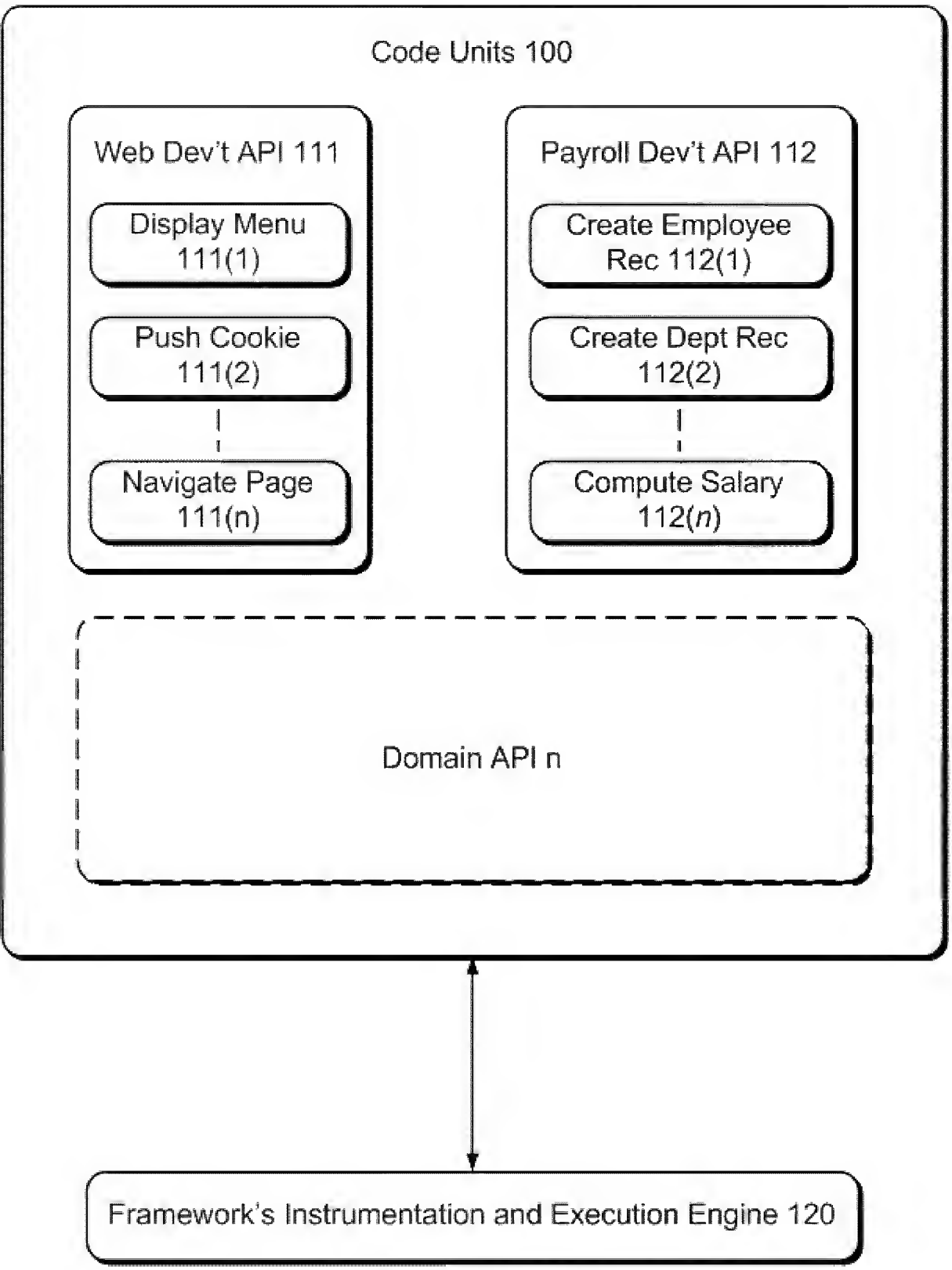
Code Units 100
Web Dev't API 111
Display Menu 111(1)
Push Cookie 111(2)
Navigate Page 111(n)
Payroll Dev't API 112
Create Employee Rec 112(1)
Create Dept Rec 112(2)
Compute Salary 112(n)
Domain API n
Framework's Instrumentation and Execution Engine 120

Fig. 3

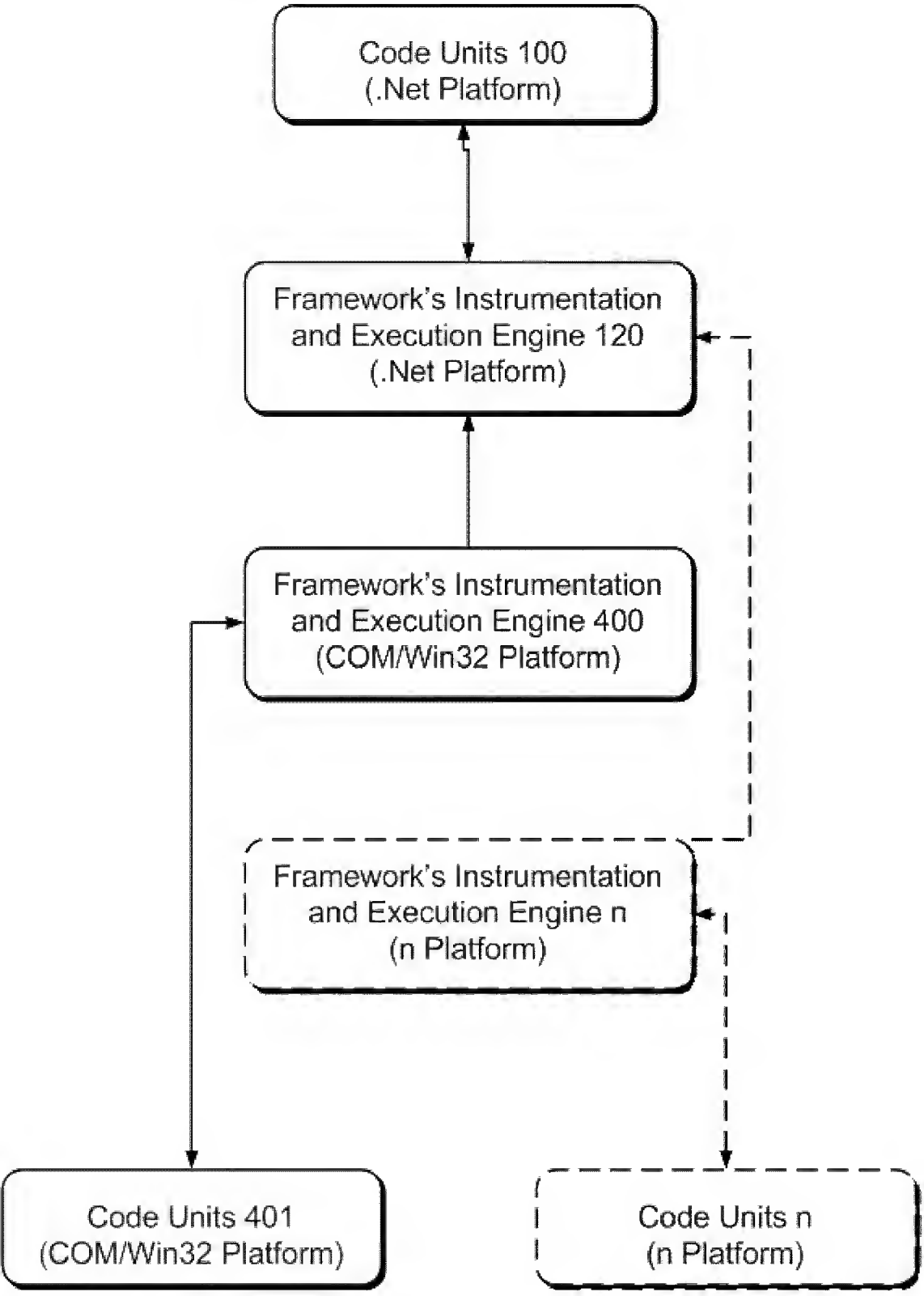
Code Units 100
(.Net Platform)
Framework's Instrumentation and Execution Engine 120
(.Net Platform)
Framework's Instrumentation and Execution Engine 400
(COM/Win32 Platform)
Framework's Instrumentation and Execution Engine n
(n Platform)
Code Units 401
(COM/Win32 Platform)
Code Units n
(n Platform)

Fig. 4

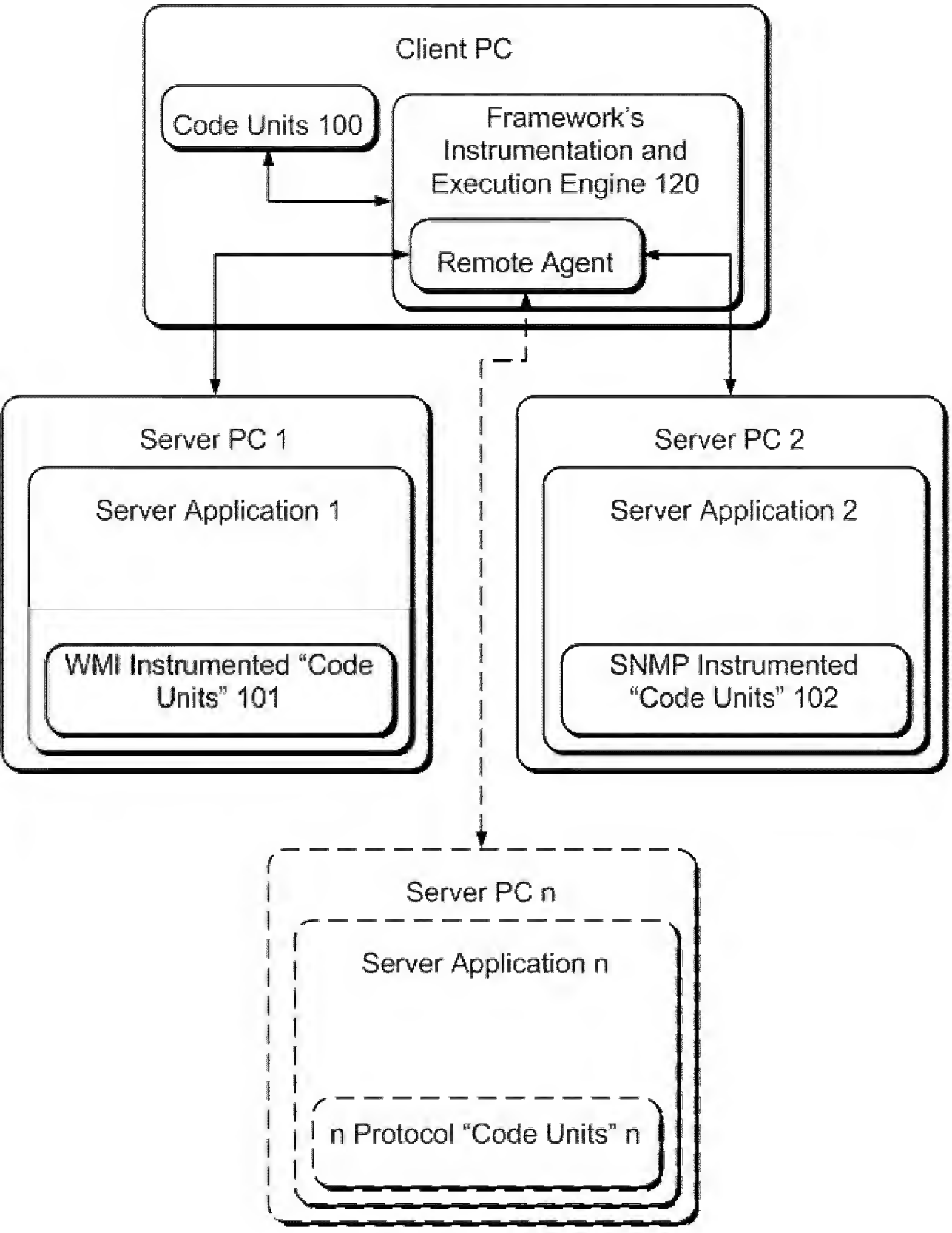
Client PC
Code Units 100
Framework's Instrumentation and Execution Engine 120
Remote Agent
Server PC 1
Server Application 1
WMI Instrumented "Code Units" 101
Server PC 2
Server Application 2
SNMP Instrumented "Code Units" 102
Server PC n
Server Application n
n Protocol "Code Units" n

Fig. 5

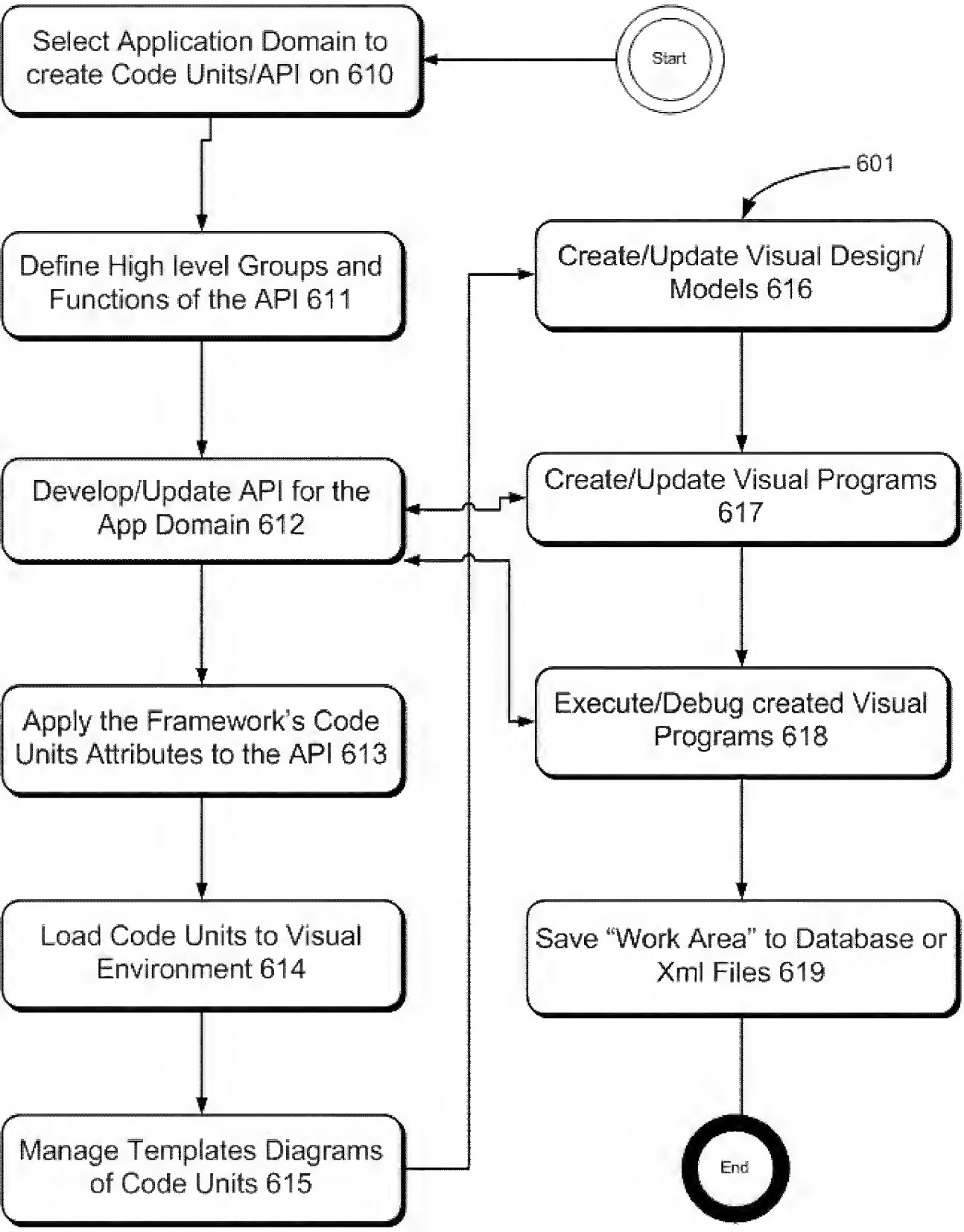
Start
Select Application Domain to create Code Units/API on 610
601
Define High level Groups and Functions of the API 611
Create/Update Visual Design/ Models 616
Develop/Update API for the App Domain 612
Create/Update Visual Programs 617
Apply the Framework's Code Units Attributes to the API 613
Execute/Debug created Visual Programs 618
Load Code Units to Visual Environment 614
Save "Work Area" to Database or Xml Files 619
Manage Templates Diagrams of Code Units 615
End

Fig. 6

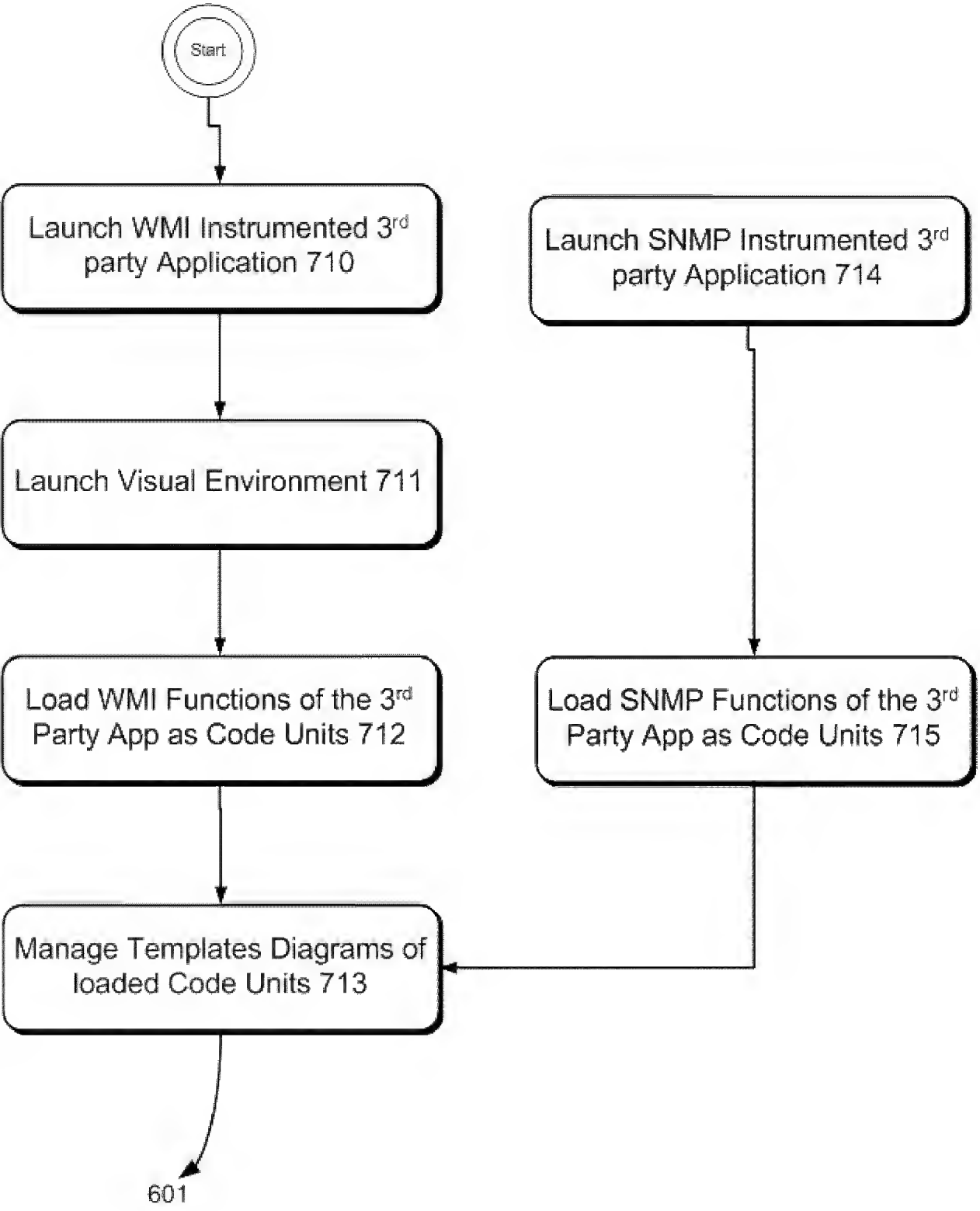
Start
Launch WMI Instrumented 3rd party Application 710
Launch SNMP Instrumented 3rd party Application 714
Launch Visual Environment 711
Load WMI Functions of the 3rd Party App as Code Units 712
Load SNMP Functions of the 3rd Party App as Code Units 715
Manage Templates Diagrams of loaded Code Units 713
601

Fig. 7